CLAIMS

1. A fluorine-containing copolymer obtained by copolymerizing tetrafluoroethylene, hexafluoropropylene and optionally perfluoro vinyl ether as component monomers,

wherein a weight ratio of tetrafluoroethylene, hexafluoropropylene and perfluoro vinyl ether units constituting said fluorine-containing copolymer is 70 to 95 : 5 to 20 : 0 to 10, respectively;

said fluorine-containing copolymer having:

a melt flow rate of 30 (g/10 minutes) or more;

a volatile content index of 0.2 % by weight or less; and

a stress relaxation modulus G(t) (unit: dyn/cm^2) which satisfies the following formula at t = 0.1 second when measured at a temperature of 310 °C:

$G(0.1) > 7 \times 10^6 \times X^{-1.62} - 3000$

where X denotes the melt flow rate (unit: g/10 minutes).

2. The fluorine-containing copolymer as claimed in claim 1, having a stress relaxation modulus G(t) (unit: dyn/cm^2) which satisfies the following formula at t = 0.1 second when measured at a temperature of 310 °C:

$G(0.1) > 7 \times 10^6 \times X^{-1.62}$

where X denotes the melt flow rate (unit: g/10 minutes).

3. A fluorine-containing copolymer obtained by copolymerizing tetrafluoroethylene, hexafluoropropylene and optionally perfluoro vinyl ether as component monomers,

wherein a weight ratio of tetrafluoroethylene, hexafluoropropylene and perfluoro vinyl ether units constituting said fluorine-containing copolymer is 70 to 95 : 5 to 20 : 0 to 10, respectively;

said fluorine-containing copolymer having:

a melt flow rate of 30 (g/10 minutes) or more;

a volatile content index of 0.2 % by weight or less; and

a stress relaxation modulus G(t) (unit: dyn/cm^2) which satisfies the following formula at t = 0.1 second when measured at a temperature of 310 °C:

$G(0.1) > 7 \times 10^6 \times X^{-1.6143} - 3000$

where X denotes the melt flow rate (unit: g/10 minutes).

4. The fluorine-containing copolymer as claimed in claim 3, having a stress relaxation modulus G(t) (unit: dyn/cm^2) which satisfies the following formula at t = 0.1 second when measured at a temperature of 310 °C:

$G(0.1) > 7 \times 10^6 \times X^{-1.6143}$

where X denotes the melt flow rate (unit: g/10 minutes).

5. The fluorine-containing copolymer as claimed in claim 1, 2, 3 or 4, having a melting point of from 245 to 280 °C.

6. The fluorine-containing copolymer as claimed in claim 1, 2, 3, 4 or 5, having a melt flow rate of from 30 to 50 (g/10 minutes).

7. The fluorine-containing copolymer as claimed in claim 1, 2, 3, 4, 5 or 6, having volatile content index of 0.15 % by weight or less.

8. The fluorine-containing copolymer as claimed in claim 1, 2, 3, 4, 5, 6 or 7, having a weight ratio of tetrafluoroethylene, hexafluoropropylene and perfluoro vinyl ether units of 75 to 95 : 5 to 20 : 0 to 5, respectively.

9. An insulating material comprising the fluorine-containing copolymer as claimed in claim 1, 2, 3, 4, 5, 6, 7 or 8.

10. An insulated cable comprising a core conductor coated with an insulating material comprising the

fluorine-containing copolymer as claimed in claim 1, 2, 3, 4, 5, 6, 7 or 8.

11. A method of insulating cable or wire which comprises extrusion coating cable or wire with the fluorine-containing copolymer as claimed in claim 1, 2, 3, 4, 5, 6, 7 or 8.